BANTA-CARBONA IRRIGATION DISTRICT

A. Cover Sheet

1. Specify: Agricultural Project Individual Application

2. Proposed Title: BCID Irrigation and Water Quality Improvement Loan Program

3. Principal Applicant: Banta-Carbona Irrigation District

4. Contact: David Weisenberger, General Manager

5. Mailing address: P.O. Box 299, Tracy, Ca 95304

6. Telephone: 209-835-4670

7. Fax: 209-835-2009

8. E-mail: bcid@inreach.com

9. Funds requested – dollar amount: $1,000,000

10. Applicant cost share funds pledged – dollar amount: District to cover the costs of administrating the loan program over the life of the program. The District sees the request for funds as seed money to begin and ongoing program that re-funds itself as it is paid back. The program is foreseen as lasting 20+ years.

11. Duration – (month/year to month/year): June-2001 to June – 20XX

12. State Assembly and Senate districts and Congressional district where the project is to be conducted. State Assembly Districts 17&26: Senate Districts 5&12, Congressional Districts 11&18.

13. Location and geographic boundaries of the project: See attached map.

14. Name and signature of official representing applicant. By signing below, the applicant declares the following:

--the truthfulness of all representations in the proposal;
--the individual signing the form is authorized to submit the application on behalf of the applicant;
--the applicant will comply with contract terms and conditions identified in section 11 of the PSP.

_____David_K. Weisenberger_______ **__February 14, 2001_____**
(*printed name of applicant*) ***date***

_____
(signature of applicant)

B. Scope of Work

EXECUTIVE SUMMARY
BANTA-CARBONA IRRIGATION DISTRICT
Loan Program

The purpose of the loan program is to provide low-interest money for irrigation system improvements, thereby improving irrigation efficiency, reducing the amount of surface drainage, and reducing the amount of sub-surface drainage entering the south delta and San Joaquin River. A by-product of the water conserved will be that there could be flexibility added to the District's distribution system bringing the District closer to an on-demand type of system. This would allow farmers the added benefit of applying irrigation water based on water scheduling. It would also make available water that could then be used for other purposes whether it be for environmental benefits, a water supply for water short entities, or a combination of the two benefits.

The ultimate benefit to this proposal is that the money granted can be used over and over to conserve water for years to come. Irrigation systems installed today with this grant money can be replaced when they wear out twenty years from now using some of the same money originally used.

Several key aspects of the District's Loan Program are:

- The loan amount applied for will be based on an application made by District landowners/Water users which will include a list of the equipment needed and an estimate of costs to be financed submitted.

- Loan funds can be used for the purchase of equipment only. Any installation expenses must be paid for directly by the landowner/water user.

- All equipment must be purchased by the District through a competitive bidding process conducted by the District.

- Bids will be solicited for all equipment materials on a case-by-case basis although requests for standardized categories of equipment/materials may be combined.

- The District will not order materials until a deposit equal to 10% of the cost has been made and all documentation has been received, reviewed and approved.

- Landowners must sign a Loan Application, an Equipment Lease Agreement and other related documents, including a recordable Memorandum of Lease. A lessee may co-sign these agreements, but the landowner is ultimately responsible for payment.

- The District will retain ownership of all equipment for the term of the District's repayment agreement with the landowner/water user. Ownership will revert to the landowner/water user for a nominal price at the end of the repayment period to the District. (The District's repayment period to the State is 10 years but, in order to loan out the available money more than once, the maximum repayment period to the District shall be five (5) years.) All lease payments will be due on July 15 of each year following the entering of the lease and the delivery of the equipment.

- While the District hopes to be able to meet all funding requests, applications will be considered and funds will be made available on a first-come-first-served basis. The District's deadline for expenditure of all funds is three (3) years from the date of the contract.

- Loan funds available for projects commencing after June 1, 2001 will be announced and made available as expedited repayments allow

- In order to spread the available funds out among District landowners, absent demonstration of special circumstances, the maximum total amount that can be borrowed by a landowner/water user for a given project will be $600 per acre and a total of $300,000.

STATEMENT OF CRITICAL ISSUES

This program is targeted for the on-farm capital improvements necessary to achieve water conservation, irrigation scheduling, and optimum crop production as influenced by water applied to the crop at the on-farm level. This type of program as been requested by the District's farmers numerous times as they know that there are benefits to be derived from making some capital improvements to their irrigation systems. What they have stated is that they need adequate capital at affordable rates with access to the funding with a reasonable expectation that they can get it. Some programs offered by the federal government in the past have had many applicants and few recipient's making the process long and difficult to obtain funding for on-farm improvements. Because of that time consuming process farmers sometimes didn't bother to apply or gave up after years of trying. The program proposed here is to localize control of the funding and have a large enough funding pool to benefit more than a few farmers.

This program is a custom fit with recommendations coming out of the CALFED process in that it is a stated goal of CALFED to reduce on-farm water consumption by improving water use efficiency through capital improvements to irrigation systems and through education causing improvements in on-farm management of the existing irrigation systems. This proposed project will supplement efforts being planned by the District to educate its farmers through future workshops in conjunction with neighboring water districts. By educating water users and then following up by providing them with a means to succeed by having a financial support structure in place to purchase needed physical facilities is a strategy that is destined to succeed. For some farmers the educational process has already taken place through their own initiative to educate themselves on these issues. Thus they are ready for the second half of the strategy, financial assistance for capital improvements. For other farmers they will educate themselves through workshops offered in the future or through other avenues of education.

As Banta–Carbona Irrigation District has spent many of the last forty years lining canals and pipelining laterals to conserve water the next logical step is to now work on conserving water applied to lands within the District. The District does have 1.5 mile of canal that is un-lined and the District could be applying for funds to line that section. But in evaluating the benefits of lining this canal or providing funding to farmers, more water can be conserved by making this money available to farmers. The District has a water conservation plan that this proposed program is a part of as well as the above-mentioned workshops to provide supplemental education to farmers and landowners. In addition a mobile lab service is available to farmers within the district to evaluate their irrigation system efficiency during the irrigation season. Thus this proposed program is not just throwing cheap money out to farmers but is working in tandem with other water conservation program elements to facilitate worthwhile long-term solutions to water management.

OBJECTIVES

The Quantifiable Objectives that this program addresses are numbers 80, 81, and 82 of Sub-region 9. Two of these objectives are to reduce pesticides to enhance and maintain beneficial uses of water to the San Joaquin River and Delta. The other objective is to reduce nutrients to enhance and maintain beneficial uses of water. As you can see from the materials that are attached to this proposal describing the program, water system capital improvements recommended for funding are those that can apply

water in a more uniform distribution across a field. This reduces the amount of over applied water at the head of a field reducing the amount of leaching of nutrients and pesticides into subsurface water that eventually reaches the San Joaquin River and the Delta. These irrigation system improvements also reduce the amount of surface run off which carry nutrients, pesticides and sediment.

In addition, the recommended facility improvements will enhance the farmer's ability to irrigate a field in a timelier manner thus reducing plant stress making it less susceptible to diseases and pest infestations. This ultimately can reduce the amount of pesticide needed per application in many cases. Another major benefit to reducing plant stress is that plants will produce more yield per acre foot of water applied by not shedding as many blossoms. Many times plants will shed a major portion of there blossoms in the middle part of summer because of heat stress, which is directly related to the amount of water available, and thus not set a good quantity of crop until a later time. When this happens, harvest times are pushed farther into fall extending the growing season and thus creating a higher exposure time to diseases and pests and then pesticides. It sometimes leads to additional water applications too. This lengthening of the growing season also increases the risk of the crop production being exposed to rain and consequently crop production losses or complete crop losses. Then a whole years worth of applied water has been wasted or its efficiency reduced severely.

I imagine this whole presentation is redundant in that DWR and CALFED obviously have recognized that these type of improvements do provide the above benefits otherwise they wouldn't be offering grants for water use efficiency improvements.

MONITORING AND ASSESSMENT

The District tracks water usage by farmers on a crop and field basis. This tracking ability is relatively new so there isn't much historical data available. But by doing this type of monitoring, water usage by fields being irrigated with the on-farm improvements provided by the Loan Program can be compared to other fields in the District that are using the conventional methods of old. This information over time should demonstrate the actual water conserved.

But installing the on-farm irrigation system improvements alone does not guarantee the desired results year in and year out. That is why the mobile lab is an important service that needs to be provided to check on the performance of the equipment periodically biannually, tri-annually, or some other interval as determined through experience to make sure the equipment is maintained properly. Along with the mobile lab farmers need refresher courses (workshops) to assist them in finding the right tools and sources of replacement equipment to reduce the time requirements on maintaining the equipment. These workshops will be facilitated by the District.

Records will be maintained by the District in computers and with hard copies of information gathered regarding mobile lab reports, workshops held, field visits performed and water used. Bookkeeping records will be maintained on computer as to all monies loaned and payments made on loans. All records kept as a part of this program will be available as long as a reasonable time is allowed to assimilate the information.

C.

COMMUNITY INVOLVEMENT

This proposal is based on community involvement. If the community doesn't participate, this program fails. This community consists of farmers and this program is directed right at them. The District will make all reasonable efforts to reach them and inform them of this program. The District would like to get all of the money out and working as soon as possible in order to have this money available again to revolve back out. Information will be disseminated to the community through billing statements and other mailings. Ditchtenders will be made aware of the program being offered and they can make personal contacts. District management will make personal contacts to inform farmers of this program.

D.

QUALIFICATIONS OF THE APPLICANTS, COOPERATORS

The project manager will be David Weisenberger, General Manager of Banta-Carbona Irrigation District. His resume is attached.

Banta-Carbona Irrigation District will be working cooperatively with neighboring water districts to coordinate quality workshop opportunities each year. It is anticipated that by doing this more speakers can be attracted to participate because of better attendance resulting in higher quality workshops.

E.

COSTS and BENEFITS

BUDGET JUSTIFICATION

The costs associated with the labor hours include salaries, fringe benefits, supplies, equipment and travel. The rates used are rates established by the Board of Directors for billing, taking into account all of the above factors involved for each job classification. Included are vehicle use for the appropriate job classifications such as the general manager and the watermaster, small tools and equipment, office equipment and supplies, and office overhead. These rates were established about two years ago and are periodically reviewed.

The rates are as follows:

Legal Counsel	$160/Hour
General Manager	$125/ Hour
Secretary/ Treasurer	$50/Hour
Assistant Secretary	$35/Hour
Water Master	$50/Hour

The labor costs probably would be cheaper if we were a larger district and had lower level administrative management staff available to evaluate loan applications, contracts, generate RFP's for vendor solicitations, generate written reports and assessments. But BCID is a small district and it is the responsibility of the general manager to handle those duties. These hours reflect a lot of work being put into a documentation effort in order to have some historical record of how this program works over 10 to twenty years. A lot of discussions have taken place in CALFED forums as to how water conservation efforts such as being solicited now will cure the current ills of the environment, but there is no history to rely on that proves or disproves that notion. Thus it seems appropriate to document not just the technical performance of irrigation improvements but to also make field observations during the season and season after season on the overall use of the equipment. This requires regular field visits whether they be just drive-bys or actual equipment inspections. These may be over ambitious goals and difficult to attain but they are worth striving for in this day in age where energy and water resources are becoming scarce.

The benefits that can be generated from this program were discussed in the Critical Issues and Objective sections of this proposal. It doesn't appear that the benefits associated with this program regarding pesticide use and the movement of pesticides will be quantifiable. But based on what was presented earlier in this proposal benefits will be derived if the improvements are used correctly and in many cases benefits will be realized even if the equipment is not used in the most efficient ways. Due to the mixed bag of irrigation system improvements that are eligible for loan money in this program it isn't possible to anticipate the quantities of water conserved, sediment removed, or salts conserved, in that we can't predict who, where, or how many of each type of these improvements will be made within the district.

Basically the proposed program will provide outcomes that provide an increment of improvement to the delta and river improvement objectives by this District making an effort to do its share in the overall picture. This program isn't going to solve anything on its own but will contribute to and supplement all other efforts being made to achieve the same objectives.

END

BANTA-CARBONA IRRIGATION DISTRICT

LOAN PROGRAM

SCHEDULE

	BCID	STATE													
	COST SHARE	GRANT MONEY	2001	2001	2001	2002	2002	2002	2002	2003	2003	2003	2003	2004	2004
	(annually)	EXPENDED	Spring	Summer	Fall	Winter	Spring	Summer	Fall	Winter	Spring	Summer	Fall	Winter	Spring
Complete financing arrangements with State (1 time expens	$2,410	$0													
Accept Applications from Water Users (15 per Year)	$9,735	$0													
Generate and send out Request for Proposals to vendors (1	$13,660	$0													
Approve loans and distribute loan proceeds	$16,850	$1,000,000													
Mobile Lab Services (10 per year)	$8,100	$0													
Farmer Workshops (1 to 2 per year)	$6,620	$0													
Data Acquisition and Records Maintenance	$18,680	$0													
Reporting, Monitoring and Assessments	$21,000	$0													
Annual Expenses	$94,645	$0													
Total for 20 Year Program	$1,892,900	$1,000,000													

This program can run in perpetuity. Basically the above schedule just continues to repeat itself.